



# Drinking Water Source Assessment

## Geauga County - Village of Andover

### Potential Contaminant Source Inventory

- Above Ground Storage Tank
- Auto Repair/Body Shop
- Boat Services/Repair/Refinishing
- Car/Boat Camper Dealer
- Chemical Drums/Storage
- Electrical Substation (Transformer)
- Gas Station (Existing/Abandoned/Refueling)
- Hazardous Waste Handling/Storage
- Leaking Underground Tank
- NPDES Permitted Facility (PCPS)
- Other Agricultural Source
- Other Commercial Source
- Pesticide - Producing Facility (S/S/T/S)
- Plastics/Synthetics Producer
- Pasture
- School Bus Area/Garage
- Surface Impoundment (RT)
- Toxic Release Inventory
- Well: Oil & Gas

Well

### Drinking Water Source Protection Area

Time of Travel

One Year

Five Year

US Highway

Municipal Boundary

Township Boundary

LOW MODERATE HIGH

### SUSCEPTIBILITY



Division of Drinking and Ground Waters  
Geographic Information Systems  
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AVOID DISPLAY IN DIRECT SUNLIGHT

0 0.125 0.25 0.5 Miles

Ohio State Plane South, NAD 1983

Drinking Water Source Assessment for the Village of Andover.

Ohio Environmental Protection Agency, Division of Drinking and Ground Waters, 2006.



### Drinking Water Source Protection Area for the Village of Andover

**INTRODUCTION.** This map documents the drinking water source protection area for the Village of Andover, and identifies potential contaminant sources in and around this area. It is based on information contained in the November 2002 Drinking Water Source Assessment Report completed for the system by Ohio EPA.

The protection area is the area of focus for efforts to protect the source of drinking water. It is based on computer modeling of the five-year time-of-travel area—the area that provides water to the wells within approximately five years. The protection area also includes an inner protection zone representing the area that supplies water to the wells in one year. Symbols on the map indicate the locations of potential contaminant sources. These are activities or facilities that—based on the types and amounts of chemicals associated with them—have the potential to release contaminants to the subsurface. The locations and nature of these potential contaminant sources may change over time and warrant periodic updating.

**SYSTEM DESCRIPTION & GEOLOGY.** The Village of Andover operates a community public water system that serves 1,262 people in Andover, Ohio. The system operates seven wells that pump an average of 186,000 gallons of water per day (GPD) from a bedrock sandstone aquifer (water-rich zone) known as the Cussewago Sandstone Aquifer. Well logs show the aquifer is covered by zero to thirteen feet of low permeable material, which provides minimal protection from contamination.

**SUSCEPTIBILITY ANALYSIS.** The ground water used by the Village of Andover has a high susceptibility to contamination because: (1) the aquifer has a shallow depth to water of 12 to 25 feet below ground surface; (2) the low-permeability layer between the ground surface and the aquifer is between 0 and 13 feet thick; (3) potential significant contaminant sources exist within the protection area. Implementing appropriate protective strategies can minimize the likelihood of contamination.

### References

**Public Drinking Water Wells.** Ohio Environmental Protection Agency, Division of Drinking and Ground Waters, 2007.  
**Public Water Source Treatment Units.** Ohio Environmental Protection Agency, Division of Drinking and Ground Waters, 2007.  
**Oil and Gas Well Locations Database.** Ohio Department of Natural Resources, Division of Geological Survey, 1997. Scale 1:15,840.  
**Digital Orthophoto Quarter Quadrangle (DOQQ).** U.S. Geological Survey, 1988 – 1996. 1 Meter Resolution.  
**Transportation Dataset.** Ohio Department of Transportation, 2001. Scale 1:24,000.  
**Digital Raster Graphic (DRG).** U.S. Geological Survey, 1996. Scale 1:24,000.  
**Digital Elevation Model (DEM) Hillshade (10x Exaggeration).** Ohio Environmental Protection Agency, U.S. Geological Survey, 2002. 10 Meter Resolution.